FILE 'REGISTRY' ENTERED AT 09:08:39 ON 08 FEB 2000 1477 SEA ABB=ON PLU=ON GCTGCTTCCTTC GACCTGACCTGGTA GGCACACGC L1GTCATCTGC | GCTGCTTCCGTC | CGGACCTGACCTG | AGGACCUGACAUG | CGGACC UGACCAG | CGGACCUGACAAG | CGGAUCUGACACG/SQSN 15 SEA ABB=ON PLU=ON L1 AND SQL=<75 L2 FILE 'CAPLUS' ENTERED AT 09:19:10 ON 08 FEB 2000 4 SEA ABB=ON PLU=ON L2 L3 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2000 ACS L3 1999:811396 CAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 132:60095 Detection of non-viral microorganisms with TITLE: nucleic acid probes specific for SRP (signal recognition particle) RNA Boles, T. Christian; Weir, Lawrence; Stone, WWW. Benjamin B.
Mosaic Technologies, USA
PCT Int. Appl., 49 pp. INVENTOR(S): PATENT ASSIGNEE(S): SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent English LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: KIND DATE APPLICATION NO. DATE PATENT NO. \_\_\_\_\_ WO 1999-US13799 19990618 19991223 WO 9966079 **A1** W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,

IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG PRIORITY APPLN. INFO.: US 1998-90063 19980619 The present invention provides rapid detection methods that detect virtually all non-viral organisms such as bacteria, fungi, and protozoa, by hybridization with SRP (signal recognition particle) RNA nucleic acid probes. The SRP RNA may be electrophoresed through a gel in which the probes have been immobilized. Using the detection methods of the present invention, major non-viral groups such as bacterial, fungi, and protozoa, as well as specific species, can be identified in samples. In addn., kits for use in carrying out the methods of the present invention are provided. 252941-58-5 253148-73-1 IT RL: ARG (Analytical reagent use); BUU (Biological use, Searcher : Shears 308-4994

1

unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses) (bacterial 4.5S RNA adaptor probe; detection of non-viral microorganisms with nucleic acid probes specific for SRP (signal recognition particle) RNA) 252941-50-7 252941-51-8 252941-54-1 252941-55-2 252941-56-3 252941-57-4 RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses) (bacterial 4.5S RNA probe; detection of non-viral microorganisms with nucleic acid probes specific for SRP (signal recognition particle) RNA) 253134-40-6D, immobilized acrydite derivs. TT 253134-41-7D, immobilized acrydite derivs. 253134-43-9D, immobilized acrydite derivs. 253134-44-0D, immobilized acrydite derivs. RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses) (capture probe CP-1; detection of non-viral microorganisms with nucleic acid probes specific for SRP (signal recognition particle) RNA) 252941-53-0 IT RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses) (fluorescent sandwich probe 2F; detection of non-viral microorganisms with nucleic acid probes specific for SRP (signal recognition particle) RNA) ANSWER 2 OF 4 CAPLUS COPYRIGHT 2000 ACS 1999:390456 CAPLUS ACCESSION NUMBER: 131:29580 DOCUMENT NUMBER: Slotted electrophoresis gel composition and TITLE: methods of use thereof Hammond, Philip W.; Adams, Christopher P.; INVENTOR(S): Abrams, Erza S.; Boles, T. Christian Mosaic Technologies, USA PATENT ASSIGNEE(S): PCT Int. Appl., 39 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION: DĂTE APPLICATION NO. KIND DATE PATENT NO. ----------WO 1998-US25780 19981204 WO 9930145 **A1** 19990617

Searcher :

Shears 308-4994

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W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
             DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS,
             JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG,
             MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK,
             SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
             ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                           AU 1999-18040
                            19990628
                                                             19981204
     AU 9918040
                       A1
                                           US 1997-67556
                                                             19971205
PRIORITY APPLN. INFO.:
                                           US 1997-PV67556 19971205
                                           WO 1998-US25780 19981204
     A slotted electrophoresis gel compn. and methods of use are
AB
     disclosed in the present invention. The invention also describes an
     app. that is used to produce a slotted electrophoresis gel compn.
     226713-18-4
IT
     RL: ANT (Analyte); ANST (Analytical study)
        (alk. phosphatase modified; slotted electrophoresis gel compn.
        and methods of use thereof)
IT
     226713-25-3
     RL: ANT (Analyte); ANST (Analytical study)
        (slotted electrophoresis gel compn. and methods of use thereof)
     ANSWER 3 OF 4 CAPLUS COPYRIGHT 2000 ACS
                         1998:78970 CAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         128:240849
                         Site-specific modification of 4.5S RNA apical
TITLE:
                         domain by complementary oligodeoxynucleotides
                         carrying an alkylating group
                         Bulygin, Konstantin; Malygin, Alexey; Karpova,
AUTHOR (S):
                         Galina; Westermann, Peter
CORPORATE SOURCE:
                         Institute of Bioorganic Chemistry, Siberian
                         Branch of Russian Academy of Sciences,
                         Novosibirsk, Russia
                         Eur. J. Biochem. (1998), 251(1/2), 175-180
SOURCE:
                         CODEN: EJBCAI; ISSN: 0014-2956
PUBLISHER:
                         Springer-Verlag
DOCUMENT TYPE:
                         Journal
                         English
LANGUAGE:
     Site-specific alkylation of RNA by reactive oligodeoxynucleotides
     provides structural information and represents the first step
     towards the design of RNA derivs. to be used for functional studies.
     Specific alkylation of 4.5S RNA at G53, the first base of the apical
     tetraloop, was achieved by incubation with oligodeoxynucleotide ON2,
     complementary to nucleotides 38-53, which carries a
     p-(N-2-chloroethyl-N-methylamino)benzylamidophosphate group at the
     5' end. Alkylation efficiency was increased by a factor of 6,
     without alterations of specificity, in the presence of a helper
                            Searcher
                                            Shears
                                                      308-4994
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oligodeoxynucleotide, ON1, complementary to nucleotides 58-71 of the opposite strand of the RNA helix. A second reactive oligodeoxynucleotide, ON1-3'-R, was obtained by attaching the alkylating group to the 3' end of ON1. ON1-3'-R was able to modify G58. In the presence of ON2 as a helper oligodeoxynucleotide, the specificity of ON1-3'-R changes and efficient alkylation of nucleotides G54, A56 and G57 of the apical region of 4.5S RNA was obsd.

# IT 181495-04-5

RL: RCT (Reactant)

(site-specific modification of 4.5S RNA apical domain by complementary oligodeoxynucleotides carrying alkylating group)

L3 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER:

1996:526164 CAPLUS

DOCUMENT NUMBER:

125:214991

TITLE:

Hybridization of two oligodeoxynucleotides to both strands of an RNA hairpin structure

increases the efficiency of RNA-DNA duplex

formation

AUTHOR (S):

Malygin, Alexey; Karpova, Galina; Westermann,

Peter

CORPORATE SOURCE:

Novosibirsk Institute of Bio-organic Chemistry,

Siberian Division of Russian Academy of

Sciences, Lavrentiev pr. 8, Novosibirsk, 630090,

Russia

SOURCE:

FEBS Lett. (1996), 392(2), 114-116

CODEN: FEBLAL; ISSN: 0014-5793

DOCUMENT TYPE:

LANGUAGE:

Journal English

AB Hybridization of two oligodeoxyribonucleotides (ON1 and ON2), complementary to opposite strands of the apical domain of Escherichia coli 4.5s RNA, was studied. ON1, complementary to bases 58-71, was not able to form a stable RNA-DNA hybrid whereas ON2, complementary to bases 38-53, was. Addn. of both oligonucleotides at the same time resulted in the formation of a ternary complex permitting hybridization of ON1 and increasing hybridization of ON2. Under this condition, binary complexes of ON1 or ON2 with 4.5s RNA were not obsd. The data demonstrate that hybridization of oligonucleotides to both strands of an RNA hairpin structure increases the efficiency of hybridization of either oligonucleotide.

IT 181495-04-5

RL: BPR (Biological process); PRP (Properties); BIOL (Biological study); PROC (Process)

(hybridization of two oligodeoxynucleotides to both strands of RNA hairpin structure increases efficiency of RNA-DNA duplex formation)

E1 THROUGH E16 ASSIGNED

=> fil reg

FILE 'REGISTRY' ENTERED AT 09:19:57 ON 08 FEB 2000 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2000 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 7 FEB 2000 HIGHEST RN 254995-83-0 DICTIONARY FILE UPDATES: 7 FEB 2000 HIGHEST RN 254995-83-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 13, 1999

Please note that search-term pricing does apply when conducting SmartSELECT searches.

=> d que

L4

15 SEA FILE=REGISTRY ABB=ON PLU=ON (181495-04-5/BI OR 226713-18-4/BI OR 226713-25-3/BI OR 252941-50-7/BI OR 252941-51-8/BI OR 252941-53-0/BI OR 252941-54-1/BI OR 252941-55-2/BI OR 252941-56-3/BI OR 252941-57-4/BI OR 252941-58-5/BI OR 253134-40-6/BI OR 253134-41-7/BI OR 253134-43-9/BI OR 253134-44-0/BI OR 253148-73-1/BI)

=> s 14 and 11

L5 15 L4 AND L1

=> d 1-15 .bevreg1; fil hom

L5 ANSWER 1 OF 15 REGISTRY COPYRIGHT 2000 ACS

RN 253134-44-0 REGISTRY

CN RNA, (dT-dT-dT-dT-dT-Cm-Gm-Gm-Am-Um-Cm-Um-Gm-Am-Cm-Am-Cm-Gm)
(9CI) (CA INDEX NAME)

OTHER NAMES:

CN 19: PN: WO9966079 SEQID: 19 claimed sequence

CI MAN

SQL 19

SEQ 1 ttttttcgga ucugacacg

==== =====

HITS AT: 7-19

REFERENCE 1: 132:60095

L5 ANSWER 2 OF 15 REGISTRY COPYRIGHT 2000 ACS

RN 253134-43-9 REGISTRY

 $RNA, \quad (dT-dT-dT-dT-dT-Cm-Gm-Gm-Am-Cm-Cm-Um-Gm-Am-Cm-Am-Am-Gm)$ (9CI) (CA INDEX NAME) OTHER NAMES: 18: PN: WO9966079 SEQID: 18 claimed sequence CNCI SQL 19 SEO 1 ttttttcgga ccugacaag ==== ======= HITS AT: 7-19 REFERENCE 1: 132:60095 ANSWER 3 OF 15 REGISTRY COPYRIGHT 2000 ACS 253134-41-7 REGISTRY RN RNA, (dT-dT-dT-dT-dT-Cm-Gm-Gm-Am-Cm-Cm-Um-Gm-Am-Cm-Cm-Cm-Am-Gm) (9CI) (CA INDEX NAME) OTHER NAMES: 17: PN: W09966079 SEQID: 17 claimed sequence CI MAN SQL 19 SEQ 1 ttttttcgga ccugaccag ==== ========= HITS AT: 7-19 REFERENCE 1: 132:60095 ANSWER 4 OF 15 REGISTRY COPYRIGHT 2000 ACS L5 253134-40-6 REGISTRY RNRNA, (dT-dT-dT-dT-dT-dT-Gm-Gm-Gm-Am-Cm-Cm-Um-Gm-Am-Cm-Am-Um-Gm) (9CI) (CA INDEX NAME) OTHER NAMES: 16: PN: WO9966079 SEQID: 16 claimed sequence CNCI MAN SQL 19 1 ttttttagga ccugacaug ==== ====== HITS AT: 7-19 REFERENCE 1: 132:60095 ANSWER 5 OF 15 REGISTRY COPYRIGHT 2000 ACS RN252941-58-5 REGISTRY DNA, d(G-C-T-G-C-T-T-C-C-T-T-C-C-G-G-A-C-C-T-G-A-C-A-A-A-A-A-A-C-G-A-T-A-A-A-C-C-A-A-C-C-A) (9CI) (CA INDEX NAME) OTHER NAMES: 8: PN: WO9966079 SEQID: 8 claimed DNA Searcher : Shears 308-4994

CI MAN SQL 41 1 gctgcttcct tccggacctg acaaaaacga taaaccaacc a SEQ HITS AT: 1-12 REFERENCE 1: 132:60095 ANSWER 6 OF 15 REGISTRY COPYRIGHT 2000 ACS L5 252941-57-4 REGISTRY RN DNA, d(G-A-C-C-T-G-A-C-C-T-G-G-T-A) (9CI) (CA INDEX NAME) OTHER NAMES: 6: PN: WO9966079 SEQID: 6 claimed DNA CI MAN SQL 14 SEQ 1 gacctgacct ggta \_\_\_\_\_\_\_\_\_\_\_ HITS AT: 1-14 REFERENCE 1: 132:60095 ANSWER 7 OF 15 REGISTRY COPYRIGHT 2000 ACS L5 RN **252941-56-3** REGISTRY CN DNA, d(G-C-T-G-C-T-T-C-C-T-T-C-C-G) (9CI) (CA INDEX NAME) OTHER NAMES: 5: PN: WO9966079 SEQID: 5 claimed DNA CNCI MAN SOL 14 1 gctgcttcct tccg --------HITS AT: 1-12 REFERENCE 1: 132:60095 ANSWER 8 OF 15 REGISTRY COPYRIGHT 2000 ACS L5 RN252941-55-2 REGISTRY CN DNA, d(G-C-T-G-C-T-T-C-C-T-T-C) (9CI) (CA INDEX NAME) OTHER NAMES: 4: PN: W09966079 SEOID: 4 claimed DNA CI MAN SQL 12 SEQ 1 gctgcttcct tc

HITS AT: 1-12

REFERENCE 1: 132:60095

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ANSWER 9 OF 15 REGISTRY COPYRIGHT 2000 ACS
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OTHER NAMES:
    3: PN: WO9966079 SEQID: 3 claimed DNA
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    MAN
CI
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L5
    ANSWER 10 OF 15 REGISTRY COPYRIGHT 2000 ACS
    252941-53-0 REGISTRY
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OTHER NAMES:
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CI
    MAN
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SEQ
         HITS AT: 1-18
REFERENCE 1: 132:60095
    ANSWER 11 OF 15 REGISTRY COPYRIGHT 2000 ACS
L5
RN
    252941-51-8 REGISTRY
    \texttt{DNA, d}(\texttt{G-C-T-G-C-T-T-C-C-G-G-A-C-C-T-G-A-C-C-T-G-G-T-A-A-A})
    (9CI) (CA INDEX NAME)
OTHER NAMES:
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CN
CI
    MAN
SQL 30
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SEQ
         HITS AT: 1-28
REFERENCE 1: 132:60095
    ANSWER 12 OF 15 REGISTRY COPYRIGHT 2000 ACS
L5
    252941-50-7 REGISTRY
RN
    DNA, d(G-C-T-G-C-T-T-C-C-T-T-C-C-G-G-A-C-C-T-G-A-C) (9CI) (CA INDEX
CN
                         Searcher: Shears 308-4994
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NAME)
OTHER NAMES:
    2: PN: WO9966079 SEQID: 2 claimed DNA
CI
    MAN
SQL 22
SEQ
        1 gctgcttcct tccggacctg ac
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HITS AT:
          1-12
          1: 132:60095
REFERENCE
    ANSWER 13 OF 15 REGISTRY COPYRIGHT 2000 ACS
L5
RN
    226713-25-3 REGISTRY
    CN
    T-C-C-G-G-G-C-C-T) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN
    7: PN: WO9966079 SEQID: 7 claimed DNA
CI
    MAN
SQL 41
        1 gctgcttcct tccggacctg agtgaatacg ttcccgggcc t
SEQ
HITS AT:
          1-12
REFERENCE 1: 131:29580
    ANSWER 14 OF 15 REGISTRY COPYRIGHT 2000 ACS
L5
    226713-18-4 REGISTRY
RN
    DNA, d(G-G-C-A-C-A-C-G-C-G-T-C-A-T-C-T-G-C-C-T-T-C) (9CI) (CA INDEX
CN
    NAME)
CI
    MAN
SQL 22
SEQ
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          HITS AT:
          1-18
REFERENCE
         1: 131:29580
    ANSWER 15 OF 15 REGISTRY COPYRIGHT 2000 ACS
L5
RN
    181495-04-5 REGISTRY
    \label{eq:decomposition} {\tt DNA, \ d(C-G-G-A-C-C-T-G-A-C-C-T-G-G-T-A), \ 5'-(dihydrogen \ phosphate)}
CN
     (9CI)
           (CA INDEX NAME)
OTHER CA INDEX NAMES:
    Deoxyribonucleic acid, d(C-G-G-A-C-C-T-G-A-C-C-T-G-G-T-A),
    5'-(dihydrogen phosphate)
    MAN
CI
SQL
    16
                          Searcher
                                         Shears
                                                  308-4994
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SEQ 1 cggacctgac ctggta

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has sin 22?

HITS AT: 1-16

REFERENCE 1: 128:240849

REFERENCE 2: 125:214991

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